

# Ascaris Infection (Ascariasis)

#### What is an Ascaris infection?

Ascaris (Ass-kuh-ris) is a worm that lives in the small intestine. Infection with Ascaris is called ascariasis (ass-kuh-rye-uh-sis). Adult female worms can grow over 12 inches in length, adult males are smaller.

#### How common is ascariasis?

Ascariasis is the most common human worm infection. Infection occurs worldwide and is most common in tropical and subtropical areas where sanitation and hygiene are poor. An estimated 1.5 billion persons were infected with *Ascaris* in 2002. Children are infected more often than adults. In the United States, infection is rare, but most common in rural areas of the Southeast.

#### What are the signs and symptoms of an Ascaris infection?

Most people have no symptoms that are noticeable, but infection may cause slower growth and slower weight gain. If you are heavily infected, you may have abdominal pain. Sometimes, while the immature worms migrate through the lungs, you may cough and have difficulty breathing. If you have a very heavy worm infection, your intestines may become blocked.

#### How is an Ascaris infection spread?

Ascaris eggs are found in human feces. After feces contaminates the soil, the eggs become infectious after a few weeks. Infection occurs when a person accidentally ingests (swallows) infectious Ascaris eggs. Once in the small intestines, immature worms hatch from the eggs. The larvae are carried through the lungs and then to the throat where they are swallowed. Once swallowed, they reach the intestines and develop into adult worms. Adult female worms lay eggs that are then passed in feces; this cycle will take between 2-3 months.

Pigs can be infected with another species of *Ascaris*. Occasionally, a pig *Ascaris* infection can be spread to humans; this occurs when infective eggs, found in the soil and manure, are ingested. Infection is more likely if pig feces are used as fertilizer in the garden; crops then become contaminated with *Ascaris* eggs.

## How can I get ascariasis?

You or your children can become infected after touching your mouth with your hands that have become contaminated with eggs from soil or other contaminated surfaces or by ingesting contaminated food.

#### What should I do if I think I have ascariasis?

See your health care provider.

### How is diagnosis of Ascaris made?

Your health care provider will ask you to provide stool samples for testing. Some people notice infection when a worm is passed in their stool or is coughed up. If this happens, bring in the worm specimen to your health care provider for diagnosis. There is no blood test used to diagnose an *Ascaris* infection.

#### What is the treatment for ascariasis?

In the United States, *Ascaris* infections are generally treated for 1-3 days with medication prescribed by your health care provider. The drugs are effective and appear to have few side effects. Your health care provider may request additional stool exams 1 to 2 weeks after therapy.

#### How can I prevent infection with Ascaris?

- Avoid contacting soil that may be contaminated with human feces.
- Do not defecate outdoors.
- Dispose of diapers properly.
- Wash hands with soap and water before handling food.
- When traveling to countries where sanitation and hygiene are poor, avoid food that may be contaminated with soil.
- Wash, peel or cook all raw vegetables and fruits before eating.

# Should I be concerned about spreading infection to the rest of my household?

No. Infection is not spread from person to person.

#### More Information:

- 1. Bethony J, Brooker S, Albonico M, Geiger Stefan M, Loukas A, Diement D, Hotez PJ. Soiltransmitted helminth infections: ascariasis, trichuriasis, and hookworm. Lancet. 2006;367: 1521-32.
- 2. Crompton, DW. Ascaris and ascariasis. Adv Parasitol. 2001;48:285-375.
- 3. Maguire JH. Intestinal nematodes (roundworms). In: Mandell GL, Bennett JE, Dolin R, editors. Principles and practice of infectious diseases. 6th ed. Philadelphia: Elsevier; 2005. p. 3260-3266.
- 4. Seltzer E, Barry M, Crompton DWT. Ascariasis. In: Guerrant RL, Walker DH, Weller PF, editors. Tropical infectious diseases. Principles, pathogens & practice. 2nd ed. Philadelphia: Elsevier; 2006. p. 1257-1264.

This fact sheet is for information only and is not meant to be used for self-diagnosis or as a substitute for consultation with a health care provider. If you have any questions about the disease described above or think that you may have a parasitic infection, consult a health care provider.

Reviewed September 8, 2008

From <a href="http://www.cdc.gov/ncidod/dpd/parasites/ascaris/factsht\_ascaris.pdf">http://www.cdc.gov/ncidod/dpd/parasites/ascaris/factsht\_ascaris.pdf</a>



